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MOTOR CORP

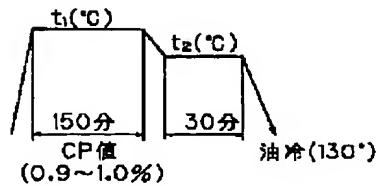
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(54) PRODUCTION OF HIGHLY ACCURATE PARTS

(57) Abstract:

PURPOSE: To produce highly accurate parts improved in damping capacity by attaining its high accuracy.

CONSTITUTION: An intermediate art parts formed by using a case hardening steel having a compsn. contg. 0.03 to 0.30% C,  $\leq 0.50\%$  Si (including zero%), 0.3 to 3.0% Mn,  $\leq 0.030\%$  P (including zero%),  $\leq 0.035\%$  S (including zero%), 0.015 to 0.06% Al and 0.005 to 0.03% N, contg., at need, Cr, Mo, V, Ni, Cu, Ti, Nb, Ca, Zr or the like, and the balance Fe with inevitable impurities are subjected to carburizing treatment, are thereafter cooled to a room temp. at a cooling velocity  $V$  of the critical cooling velocity  $V_{C_1}$  to  $V_{C_4}$  ( $^{\circ}\text{C/sec}$ ) or below expressed by a prescribed formula, are, if desired, subjected to modifying working in which the shape of the parts is modified, are subsequently reheated to a temp. lower than the primary carburizing temp. in a carburizing or carbo-nitriding atmosphere and are thereafter subjected to hardening treatment.



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